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INTRODUCTION.

The month of June has not been marked by any unusual meteorological features.

Severe local storms occurred in many of the states, but they were not as numerous or as violent as those which occurred during the preceding months, April and May.

The most important feature of the month was the destructive floods in the lower Missouri river and in the Mississippi river, between Saint Louis, Missouri, and Cairo, Illinois.

In the Missouri valley the rainfall exceeded the June average by nearly three inches. Large excesses also occurred in the middle and south Atlantic states. Large deficiencies occurred in the extreme northwest, southern slope, and north Pacific coast region.

The mean temperature of June has been above the normal on the Atlantic coast and west of the Rocky mountains, and below the normal over the interior districts, but the departures, in general, are small.

The weather over the north Atlantic ocean during the month was generally fair with high barometric pressure, but dense fogs prevailed from the coast of the United States eastward to the fortieth meridian.

Chart ii. shows the paths of the centres of but three atmospheric depressions, and these exhibited very slight energy.

The ice chart shows that during June icebergs have drifted about three degrees farther to the eastward than in May, while the southern limit remains on the same parallel.

In the preparation of this REVIEW, the following data, received up to July 20th, have been used; viz.: the regular tri-daily weather-charts, containing data of simultaneous observations taken at one hundred and thirty-one Signal-Service stations and fifteen Canadian stations, as telegraphed to this office; one hundred and seventy-six monthly journals, and one hundred and sixty-six monthly means from the former, and fifteen monthly means from the latter; two hundred and forty-one monthly registers from voluntary observers; fifty-one monthly registers from United States Army post surgeons; marine records; international simultaneous observations; marine reports, through the co-operation of the "New York Herald Weather Service;" abstracts of ships' logs, furnished by the publishers of "The New York Maritime Register;" monthly weather reports from the local weather services of Illinois, Indiana, Nebraska, New Jersey, and Tennessee, and of the Central Pacific railway company; trustworthy newspaper extracts; and special reports.

ATMOSPHERIC PRESSURE.

[*Expressed in inches and hundredths.*]

The distribution of mean atmospheric pressure for the month of June, 1883, determined from the tri-daily telegraphic observations of the Signal Service, is shown by the isobarometric lines on chart iii.

The regions of greatest mean pressure are the north Pacific coast, and the south Atlantic and Gulf states. In the north Pacific coast region, a small area is inclosed by the isobar of 30.05, the highest monthly means being 30.07 and 30.08, at Roseburg and Portland, Oregon, respectively. The high area covering the southeastern part of the country, is inclosed by the isobar of 30.0, which extends from eastern Texas to Virginia, and thence along the Atlantic coast to Nova Scotia. The highest barometric means recorded in this region were 30.05 at Cedar Keys and Jacksonville, Florida, and Augusta, Georgia.

The area of least mean pressure covers southern Arizona, New Mexico, southeastern Colorado, and western Texas. In southern Arizona, a small area is inclosed by the isobar of 29.75. The least monthly mean pressures, 29.74 and 29.75, are are from Yuma and Camp Thomas, Arizona, respectively. Over the central Rocky mountains region, the extreme northwest, lake region, and Saint Lawrence valley, the monthly barometric means range from 29.80 to 29.90.

The mean atmospheric pressure of June, 1883, compared with that of the preceding month, shows a slight increase over the north Pacific coast region, and in the states bordering on the Atlantic. Over an area extending from western Illinois to eastern Colorado, and southward to the Texas coast, no change has occurred. In all other parts of the country, the mean pressure is below that of May, the changes being, in general, unimportant, but are most marked in the upper lake region, Arizona, and southern California, where they vary from .06 to .10.

DEPARTURES FROM THE NORMAL VALUES FOR THE MONTH.

On the Atlantic coast and west of the Missouri and lower Mississippi rivers, except in southern California, the mean pressure is above the June normal. The excess is greatest over the northern and middle slopes and in New England, the greatest departures being .08 at Boston, Massachusetts, and Fort Benton, Montana, and .09 at Denver, Colorado. Over an area extending from the lake region to the Gulf of Mexico the monthly borometric means vary from .01 to .07 below the normal, the departures being greatest in the lake region.

BAROMETRIC RANGES.

The monthly barometric ranges were greatest in New England, where they, generally, exceeded 1.00. They were least in Florida, along the Gulf coast, and in Arizona. Between the Mississippi river and Rocky mountains north of the thirty-fifth parallel, the ranges were very uniform and varied between .50 and .60. In the several districts the monthly ranges varied as follows:

New England.—From 0.97 at New Haven, Connecticut, to 1.12 at Portland, Maine.

Middle Atlantic states.—From 0.61 at Cape Henry and Lynchburg, Virginia, to 1.04 at Albany, New York.

South Atlantic states.—From 0.37 at Jacksonville, Florida, to 0.52 at Macon, North Carolina.

Florida peninsula.—From 0.20 at Key West, to 0.31 at Cedar Keys.

Eastern Gulf.—From 0.32 at Pensacola, Florida, and New Orleans, Louisiana, to 0.44 at Starkville, Mississippi.

Western Gulf.—From 0.38 at Galveston, Texas, to 0.54 at Fort Smith and Little Rock, Arkansas.

Ohio valley and Tennessee.—From 0.43 at Chattanooga and Knoxville, Tennessee, to 0.76 at Indianapolis, Indiana.